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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,908	12/30/2003	Susan K. Bronk	18,298	1392
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KIMBERLY-CLARK WORLDWIDE, INC. 401 NORTH LAKE STREET NEENAH, WI 54956			EXAMINER CRAIG, PAULA L	
			ART UNIT	PAPER NUMBER
			3761	

DATE MAILED: 02/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/749,908

Applicant(s)

BRONK ET AL.

Examiner

Paula L. Craig

Art Unit

3761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Amendment***

1. As to the objections to the drawings listed in Form PTO-948, and under 37 CFR 1.83(a) in relation to Claim 19, Applicant's amendment filed November 21, 2005 is persuasive; these objections are withdrawn. However, a new objection to the drawings for Claim 22 is made in response to Applicant's arguments; see below.

2. It is noted by the Examiner that revised Fig. 1 of the Drawings as submitted November 21, 2005 includes ruffling around the waist which is more extensive than that shown in the originally filed Fig. 1. This is acceptable as having its basis in the discussion of shirring in Applicant's specification, page 16, lines 32-36.

3. As to the rejections of Claims 4, 6, 11, and 17 under 35 U.S.C. 103(a) over Damaghi, of Claim 7 over Damaghi in view of Glaug, and Claims 19-22 over Damaghi in view of Toyoshima, Applicant's arguments have been fully considered but they are not persuasive. Damaghi shows numerous configurations of the elastic, in some of which the covering of the elastic appears to be continuous with the outer cover, as in Figs. 2, 3A and 12, and in some of which the covering of the elastic appears not to be continuous with the outer cover, as in Figs. 1, 1A, 4, 6, 8, 10, 17, 20, 21, and 22. Damaghi also describes the elastic belt as either being made of elastic material or having elastic elements attached to it (col. 5, line 66 to col. 6, line 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to extend the elastic beyond the edge of the outer cover, as taught by Damaghi. As to the shirring, while Damaghi does not use the word "shirr", the ruffled edges visible around the upper

edge of the waist area in Figs. 1 and 1A, and the vertical lines visible around the waist in Figs. 1A, 2, and 15-18, strongly suggest shirring. The shirring depicted in Damaghi differs very little from the shirring depicted in Applicant's specification, Fig. 6. Also see the discussion of shirring in paragraph 5 below.

4. As to the rejections of Claims 1-3, 5, 8-10, 12-16, and 18 under 35 U.S.C. 102(b) over Damaghi, Applicant's arguments have been considered and are persuasive. The rejection of Claims 1-3, 5, 8-10, 12-16, and 18 on this ground are withdrawn.

5. As to the rejections of Claims 1-3, 6-13, and 15-18 under 35 U.S.C. 102(e) over Meyer, these rejections are maintained for the same reasons as given in the previous Office Action. Applicant argues that Meyer does not show the unitary waist elastic element shirring the back waist region, but rather that the waist elastic 38 of Meyer provides an expandable area of the diaper. Applicant's specification describes shirring as being provided by stretching an elastic element, attaching it, and allowing the elastic element to retract (specification, page 16, lines 32-36); however, in an apparatus claim the method by which shirring is formed is not relevant to patentability. The usual definition of the word "shirr" is drawing up or gathering, which is the function of elastic. The waist elastic 38 of Meyer is described as elasticizing the rear waist section (Meyer, paragraph 50). The waist elastic of Meyer is a neck-bonded or stretch-bonded laminate (paragraphs 22, 26, 27, and 53). The backsheet is described as neckable (paragraphs 24 and 25). While Meyer does not use the word "shirr", shirring is considered by the Examiner to be inherent in Meyer. As to Applicant's contention that Fig. 1 of Meyer does not show shirring, the Examiner notes that it is conventional in many patent

drawings of elasticized absorbent articles to show them in an uncontracted state, for the sake of clarity, as in Figs. 2-5 of Applicant's specification. Shirring occurs whenever elastic is attached in an extended state to another layer of material. Shirring also occurs when elastic material is attached to a less-elastic, extensible material, extended (as when the article is worn), and then allowed to relax. An expandable material may therefore also be shirred when the expansion is released.

6. In light of Applicant's arguments and amendment, new grounds of rejection are made for Claims 1-15.

### ***Drawings***

7. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, for Claim 22, the fastener attached to each of the outboard portions must be shown or the features canceled from the claim. Applicant argued in the response filed November 21, 2005 that the unitary waist elastic element claimed in Claim 19 is the waist elastic element at the front waist region (referred to in other claims as the second unitary waist elastic element, as in Claim 14). This waist elastic element does not have an attached fastener shown in the drawings.

### ***Claim Rejections - 35 USC § 102***

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

9. Claims 1-3, 8-9, and 12-13 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent Publication No. 2002/0165517 A1 to Datta et al.

10. For Claim 1, Datta shows a disposable absorbent article having an absorbent core and an outer cover (Figs. 1-4 and paragraphs 52-54). A unitary waist elastic element defines a waist elastic element inboard portion and a pair of unitary waist elastic element outboard portions (waist elastic member 58; fit panel 48 and side panel 106; Figs. 1 and 3 and paragraphs 71, 73 and 78). The unitary waist elastic element is attached to the back waist region, and the unitary waist elastic element outboard portions extend laterally beyond the chassis of the absorbent article to provide a pair of ears (Fig. 3). The unitary waist elastic element inboard portion shirrs the back waist region (Figs. 1 and 4 and paragraphs 71-73).

11. For Claim 2, Datta shows the unitary waist elastic element attached to an interior surface of the article (Figs. 1-4).

12. For Claim 3, Data shows the unitary waist elastic element further defining a unitary waist elastic element upper edge, and the upper edge is coterminous with a lateral end edge of the article. See Figs. 1-4.

13. For Claim 8, Datta teaches the unitary waist elastic element upper edge of the inboard portion being attached to an interior surface of the article. See Datta, Figs. 1-4.

14. For Claim 9, Datta teaches a portion of the unitary waist elastic element lower edge of the inboard portion being attached to the interior surface of the article. See Datta, Figs. 1-4.

15. For Claim 12, Datta teaches a fastener attached to each of the unitary waist elastic element outboard portions. See fastener 60, Figs. 1-4.

16. For Claim 13, Datta teaches the outer cover being made of a polyolefin film or thin plastic film (paragraph 58). Datta is silent as to the film being stretchable; however, such thin films always are stretchable to at least some extent. Stretchability is considered to be inherent in Datta.

***Claim Rejections - 35 USC § 103***

17. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Datta.

18. For Claim 4, Datta teaches all the limitations of Claim 1, as described above in paragraph 10. Datta does not expressly teach the upper edge of the unitary waist elastic inboard portion being at least 5 mm from a lateral end edge of the absorbent article. Applicant's specification does not indicate that the extension of the upper edge at least 5 mm from the lateral end edge serves any stated purpose or solves any particular problem in itself, but states this is the result of choosing when to cut the diapers apart in the manufacturing process (Applicant's specification, page 17, lines 12-24). The extension is therefore considered a design choice, and it would have been obvious to one skilled in the art at the time of the invention to extend the upper edge 5 mm or more from the lateral end edge.

19. Claims 5-7, 10-11, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Datta in view of U.S. Patent No. 5,722,127 to Coates.

20. For Claim 5 and 15, Datta teaches all the limitations of Claim 1, as described above in paragraph 10. Datta does not teach the unitary waist elastic lower edge of the inboard portion being curvilinear. Coates teaches the lower edge of the inboard portion being curvilinear (Figs. 1, 1A, 2, 2A, 2C, 3, and col. 5, lines 26-38). Coates teaches that this elasticized curve creates a pouch in the bumper which helps to retain fluid (col. 5, lines 26-67 and col. 6, line 66 to col. 7, line 11). It would have been obvious to one skilled in the art at the time of the invention to modify the article of Datta to include the lower edge of the inboard portion being curvilinear, as taught by Coates, to create a pouch to retain fluid.

21. For Claim 6, Datta/Coates does not teach the lower edge of the inboard portion having a radius of curvature of less than 25 cm. However, the radius of curvature is a result effective variable, since it should match the curvature of the wearer's body. The discovery of an optimum value of a result effective variable is ordinarily within the ordinary skill in the art. See *In re Boesch and Slaney*, 205 USPQ 215 (CCPA 1980).

22. For Claim 7, Datta/Coates teaches the unitary waist elastic element lower edge defining a "w" shape. See Coates, Fig. 2C.

23. For Claim 10, Datta does not teach the unitary waist elastic element lower edge of the outboard portions being configured to provide curved leg cut-outs. Such cut-outs are well-known to improve comfort. Coates teaches curved leg cut-outs (Fig. 2C). It would have been obvious to one skilled in the art at the time of the invention to modify the article of Datta to include curved leg cut-outs, as taught by Coates, to improve comfort.



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24. For Claim 11, Datta/Coates does not teach the curved leg cut-outs having a radius of curvature of less than 25 cm. The radius of curvature is a result effective variable, since it should match the curvature of the leg. The discovery of an optimum value of a result effective variable is ordinarily within the ordinary skill in the art.

25. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Datta in view of Damaghi.

26. For Claim 14, Datta teaches all the limitations of Claim 1, as described above in paragraph 10. Datta also teaches a second unitary waist elastic element defining a second unitary waist elastic element inboard portion, which is attached to the front waist region (see elastic along front of waist edge 32, Figs 1-4 and paragraphs 71-72).

Datta teaches the second unitary waist elastic element inboard portion attached to the front waist region shirring the front waist region (Figs. 1 and 4). Datta does not expressly teach the second unitary waist elastic element having outboard portions which extend laterally beyond the chassis to provide a second pair of ears. Damaghi teaches the second unitary waist elastic element having outboard portions which extend laterally to provide a second pair of ears (see Fig. 3, elastic element 127). Damaghi teaches extension of the elastic beyond the chassis, as described above in paragraph

3. The elasticized band members of Damaghi allow the article to be tensioned to securely fasten it to the body of the wearer (Abstract). It would have been obvious to modify the article of Datta to include the second unitary waist element as taught by Damaghi, to securely fasten an absorbent article to the body of a wearer.

**Conclusion**

27. The additional prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent Nos. 4,606,964 and 4,857,067 show shirring. U.S. Patent No. 6,413,249 to Turi et al. shows elastic extending beyond the chassis. U.S. Patent No. 6,132,410 to Van Gompel et al. shows unitary waist elastic in the front and rear.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paula L. Craig whose telephone number is (571)272-5964. The examiner can normally be reached on 8:30AM-5:00PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tanya Zalukaeva can be reached on (571) 272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Art Unit 3761